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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/772,149	01/29/2001	James A. Barnard	82008RLO	8690

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Patent Legal Staff
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EXAMINER

HOFFMAN, BRANDON S

ART UNIT PAPER NUMBER

2136

DATE MAILED: 07/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary

Application No.

09/772,149

Applicant(s)

BARNARD ET AL.

Examiner

Brandon S. Hoffman

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 October 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

DETAILED ACTION

1. Claims 1-20 are pending in this office action.
2. Applicant's arguments, filed October 28, 2004, have been considered and are persuasive. However, a new ground of rejection is made in view of ECMA-267, Yoon, and Yokota et al.

Rejections

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim Rejections - 35 USC § 103

4. Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over ECMA-267 2nd edition (hereinafter, ECMA) in view of Yoon (U.S. Patent Pub. No. 2002/0004832 A1), and further in view of Yokota et al. (U.S. Patent No. 6,907,184).

Regarding claims 1, 3, and 15, ECMA teaches a copy-protected optical disc/method for copy-protecting information recorded on an optical disc, comprising:

- A preformed identification number (ID) that is impressed upon the optical disc and a number of other optical discs during optical disc manufacture (Annex J, the SID code);

- A unique identification number for the optical disc which was written on the optical disc after it is manufactured (Annex H, first section, the BCA is unique to each CD).

ECMA does not specifically teach that the preformed ID is in the ATIP signal and the subcode and an encrypted program written onto the optical disc wherein the encryption of such program is based upon the preformed ID and the unique ID and includes two or more selectable security levels.

Yoon teaches the preformed ID is in the ATIP signal and the subcode (paragraph 0037).

It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to combine storing ID's in the ATIP signal and the subcode, as taught by Yoon, with the disc/method of ECMA. It would have been obvious for such modifications because the ATIP signal is existent on a blank medium, thus allowing an ID to exist before any data has been written.

The combination of ECMA/Yoon still does not teach an encrypted program based on the preformed ID and unique ID.

Yokota et al. teaches an encrypted program written onto the optical disc wherein the encryption of such program is based upon the preformed ID and the unique ID and includes two or more selectable security levels (col. 4, line 66 through col. 5, line 11).

It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to combine encrypting programs using the preformed ID and the unique ID, as taught by Yokota et al., with the disc/method of ECMA/Yoon. It would have been obvious for such modifications because the combination of a master key and a unique key provides a unique encryption key to provide more secure encryption.

Regarding claims 2 and 4, the combination of ECMA in view of Yoon/Yokota et al. teaches further including the preformed ID recorded in the data stream (see paragraph 0037 of Yoon).

Regarding claim 5, the combination of ECMA in view of Yoon/Yokota et al. teaches wherein the preformed ID includes the maximum start of lead-in and the start of lead-out for the disc; the preformed ID is recorded in special information and special information of the ATIP signal (see paragraph 0037 of Yoon).

Regarding claim 6, the combination of ECMA in view of Yoon/Yokota et al. teaches further including the step of reading the preformed ID and the unique ID from the disc and decrypting the encrypted program using the preformed ID and the unique

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ID (see col. 4, line 66 through col. 5, line 11 of Yokota et al., symmetric encryption/decryption uses the same key for both processes).

Regarding claim 7, the combination of ECMA in view of Yoon/Yokota et al. teaches in which the unique ID is recorded at one or more known absolute sector addresses on the disc (see Annex H, BCA, section H.1 of ECMA).

Regarding claim 8, the combination of ECMA in view of Yoon/Yokota et al. teaches in which the unique ID is recorded into the second session (see Annex H, BCA, section H.1 of ECMA).

Regarding claim 9, the combination of ECMA in view of Yoon/Yokota et al. teaches in which the disc further includes a recordable area (based on the fact the ATIP signals only exist on recordable mediums, there must be a recordable area).

Regarding claims 10 and 11, the combination of ECMA in view of Yoon/Yokota et al. teaches a copy-protection system including a computer, the copy-protected optical disc of claim 1, and an encrypting program capable of reading the preformed ID and the unique ID from the copy-protected optical disc of claim 1 and encrypting a customer program using them (see col. 4, line 66 through col. 5, line 11 of Yokota et al., paragraph 0037 of Yoon).

Regarding claim 12, the combination of ECMA in view of Yoon/Yokota et al. teaches in which an encrypting program is pressed onto the copy-protected optical disc (see paragraph 0037 and fig. 3 of Yoon).

Regarding claim 13, the combination of ECMA in view of Yoon/Yokota et al. teaches in which the encrypting program is located on another computer system or on a network (see col. 4, line 66 through col. 5, line 11 of Yokota et al., the computer that encrypts the data is located on a different computer than the one that will read the data).

Regarding claim 14, the combination of ECMA in view of Yoon/Yokota et al. teaches further including: reading the Drive ID of the CD-ROM drive to determine whether it is a reader/writer or a reader only; and using that information to determine which preformed ID may be used in accordance with the predetermined security level (see fig. 1, ref. num 13 of Yokota et al.).

Regarding claims 16-18, the combination of ECMA in view of Yoon/Yokota et al. teaches with the decrypting program reading the preformed ID from the ATIP signal, the subcode, and the at least one known absolute sector address (see col. 4, line 66 through col. 5, line 11 of Yokota et al., symmetric encryption/decryption uses the same key for both processes).

Regarding claim 19, the combination of ECMA in view of Yoon/Yokota et al. teaches in which valid values of the unique ID correspond to only a small part of the range of possible numbers (see paragraph 0037 of Yoon, the serial numbers only span a small range of possible numbers).

Regarding claim 20, ECMA teaches a uniquely identified programmable CD-ROM optical disc, comprising:

- A first preformed ID which is formed (Annex J, the SID code); and
- A unique ID which is written in the recordable area at a known absolute sector address (Annex H, first section, the BCA is unique to each CD).

ECMA does not specifically teach that the first preformed ID is formed in the ATIP signal and a second preformed ID is formed in the subchannel data in the lead-in zone of the first session.

Yoon teaches the preformed ID is in the ATIP signal and the subchannel data (paragraph 0037).

It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to combine storing ID's in the ATIP signal and the subcode, as taught by Yoon, with the disc/method of ECMA. It would have been obvious for such

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modifications because the ATIP signal is existent on a blank medium, thus allowing an ID to exist before any data has been written.

The combination of ECMA/Yoon still does not teach a second preformed ID.

Yokota et al. teaches a second preformed ID (col. 4, line 66 through col. 5, line 11).

It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to combine a second preformed ID, as taught by Yokota et al., with the method of ECMA/Yoon. It would have been obvious for such modifications because a second ID allows combination with a first ID to create a unique encryption key.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brandon S. Hoffman whose telephone number is 571-272-3863. The examiner can normally be reached on M-F 8:30 - 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz R. Sheikh can be reached on 571-272-3795. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Branda T. Hoff

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J. Ma
7/21/05